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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,157	02/18/2004	Floyd Backes	160-030	6049
34845	7590	12/12/2006	EXAMINER	
McGUINNESS & MANARAS LLP			NGUYEN, HANH N	
125 NAGOG PARK			ART UNIT	
ACTON, MA 01720			PAPER NUMBER	
			2616	

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/781,157

Applicant(s)

BACKES ET AL.

Examiner

Hanh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE filed on 11/28/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 11 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/4/05; 5/26/05; 4/28/05 10/28/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: IDS filed on 4/28/05; 10/28/04

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 recites the limitation "on the other channels" in line 3. Claim 4 recites the limitation "on said second channel" in line 7. Claim 5 recites the limitation "the step of requesting association requests association" in line 1 is redundant and vague. There are insufficient antecedent basis for these limitations in the claims 2, 4 and 5 respectively.

Claims 5 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 5, what is the "alternative access point" operating on ?

Claim 11 depends on claim 1. It is not clear whether "the access point" on line 4 is referred to "a current access point" or "an alternative access point" in claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent Application Publication No. US 2003/0036374 by English et al. in view of U.S. Patent No. 6,580,700 to Pinard et al.

Regarding claims 1, 11, English teaches a method for use by a wireless device (e.g., mobile node 902a, see FIG. 10) in a wireless communications environment (see fig.10, page.11, paragraph 0164; wireless network 900b), the method comprising the steps of associating the wireless device with a current access point (e.g., see page 12, paragraph 0165; mobile node 902a is serviced by first access point 904a. In addition, see paragraph 0170, particularly lines 9-17 mobile node 902a is able to make decision which of access points 904a or 904b it is associated with); ascertaining, by the wireless device (mobile 902a), whether the wireless device should attempt to associate with an alternative access point (e.g., see paragraph 0171, page 13, mobile node 902a while moving from access point 904a to access point 904b, finds that the signal power/BER is better with access point 904b, so the mobile 902a decides to associate with access point 904b); the ascertaining includes calculating distance to the alternative access point (page 13, paragraph 0171; the mobile 902a waits until it gets to distance X from the access point 904b before trying to associate with access point 904b) and requesting association with the alternative access point if it is ascertained that the alternative access point is preferable (e.g., see paragraph 0180 regarding the handoff of communications to a new access point; see also generally paragraphs 0146-0181).

However, English may not specifically disclose the ascertaining includes calculating an indication of available data rate and load from the alternative access point.

Pinard, like English, also teaches a method for use by a wireless device for associating with access points (e.g., see abstract and col. 2, line 36-col. 3, line 36). Further, Pinard specifically teaches ascertaining for association with an alternative access point (e.g., see col. 2,

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lines 49-59 regarding "associating with the most eligible access point at the highest data rate") includes calculating an indication of available data rate (e.g., see fig.3, step 9; col. 5, lines 26-31; regarding "mobile unit associates an access point with highest data rate"; see also col. 10, lines 13-18 regarding "recognizing the data rate of incoming broadcast signals.."). Pinard further discloses in fig.5, steps 19 and 20, col.6, lines 20-30; that the access point selects the most eligible access point (alternative access point) based on how many mobile units (current load) currently are associated with a given access point). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the access point association teachings of Pinard to the access point association method of English in order to provide access point association with improved selection of an optimum access point (e.g., see col. 2, lines 26-35).

Regarding claim 2, examiner does not examines limitation " operating on other channels" because this limitation lacks of antecedent and is not supported by its parent claim. English teaches automatically collecting, by the wireless device, information about alternative access points (e.g., see in page 12, paragraph 0166; mobile node scans for available access points and automatically connects to a desired access point).

Regarding claim 3, Pinard teaches ascertaining further includes the step of determining that the wireless device should attempt to associate with the alternative access point if the alternative access point has a lower biased distance relative to the wireless device (e.g., see page 13, paragraph 0171; the mobile 902a waits until it gets to distance X from the access point 904b before trying to associate with access point 904b; the distance X means that the signal power/BER with access point 904b is better).

Regarding claim 4, English in view of Pinard teach the method discussed above regarding claim 3, and further, English teaches calculating a first biased distance between the wireless device (e.g., mobile node 902) and the current access point based on "x" samples (e.g., see paragraphs 0167-0168 and 0175 regarding the impulse radio unit 1016 within mobile node 902 triangulating the current position of the mobile node 902, inherently comprising three or more samples); and calculating a second biased distance between the wireless device and the alternative access point based on "y" samples (e.g., see paragraphs 0175-0180, mobile node 902 estimating such a distance by comparing the current position of the mobile node 902 with a map generated in step 1104 of FIG. 11 which comprises the position of a different access point such as 904b or 904c) where "y" (e.g., known position of mobile node 902 and known position of access point 904b) is less than "x" (e.g., three or more samples for triangulating the current position of mobile node 902). Also, as discussed above, Pinard teaches ascertaining further includes the step of determining that the wireless device should attempt to associate with the alternative access point if the alternative access point has a greater available data rate than the current access point (e.g., see col. 5, lines 26-31; regarding selecting the "highest data rate" for association and see col. 7, lines 26-31; regarding not associating with an alternative access point if the alternative access point is the same data rate with similar signal strength as the current access point). As discussed above, the teachings of Pinard provide access point association with improved selection of an optimum access point (e.g., see col. 2, lines 26-35). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the access point association teachings of Pinard to the access point association method of English in order

to provide access point association with improved selection of an optimum access point (e.g., see col. 2, lines 26-35).

Regarding claim 5, English teaches sending a message to the alternative access point (e.g., see paragraph 0173, mobile node 902a communicates with different access points 904b, 904c via impulse radio signals 914, see fig.9).

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. US 2003/0036374 by English et al. in view of U.S. Patent No. 6,580,700 to Pinard et al. and further in view of Parks (US pat. 6,959,001 B1).

Regarding claim 12, with the discussion of English and Pinnard in claim 1 above, English does not disclose a communication protocol mode supported by the alternative access point. Parks discloses a method providing call handoff to a customer wherein the customer selects a type of handoff, bandwidth (available rate) and distance (selecting the alternative access point) and a preferable protocol (protocol). See abstract and fig.3, steps 305 and 315). Therefore, it would have been obvious to one ordinary skill in the art to enable mobile unit on English while selecting the most alternative access point, may select a protocol supported by the the most alternative access point. The motivation is to provide better qos in responding the requirements of different environments.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re*

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Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-5 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of copending Application Nos.

10/780,775; 10/780,804; 10/781,121; 10/781,214; 10/781,250. Although the conflicting claims are not identical, they are not patentably distinct from each other because each recite either identical or substantially the same limitations.

Specifically, at the time of filing, Application No. **10/780,775** comprises independent claim 1 which is essentially just a broader version of claim 1 of the instant application, whereby the primary difference is that the latter application refers to "transmission power level" while the instant application refers to "signal strength of transmissions". At the time of the invention it would have been obvious to one of ordinary skill in the art to select ascertaining based upon transmission power level instead of ascertaining based upon signal strength of transmissions and/or data rate since one of ordinary skill in the art readily recognizes that adjusting the signal strength of transmissions and/or data rate implicitly results in a proportional adjustment of the transmission power level. Additionally, the present amendment of "available data rate" is obvious variations, wherein it is well known in the art for a data rate to be based upon signal strength.

Additionally, at the time of filing, the claims of Application Nos. 10/781,121 and 10/781,250 are written to be identical to claims 1-5 of the instant application with the exception that the preamble of the claims of the latter application recites a "program product" whereas the preamble of the claims of the instant application recites a "method". At the time of the invention it would have been obvious to one of ordinary skill in the art to utilize a program product for performing a method since one of ordinary skill in the art readily recognizes that a program product may advantageously perform steps of a method in order to provide a functional operation.

Further, at the time of filing, the claims of Application No. 10/780,804 and 10/780,214 are identical to claims 1-5 of the instant application with the exception that the latter applications include the additional language of "logic for" whereas the preamble of the claims of the instant application recites a "method". At the time of the invention, it would have been obvious to one of ordinary skill in the art to implement steps of an invention within logic to perform method in the instant application since one of ordinary skill in the art readily recognizes that it is well known in the art to implement steps of invention with logic in order to perform method in the invention. It is well known in the art for a data rate selected based upon signal strength. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rezaiifar et al. (Us pat. 6,996,127 B2) ;

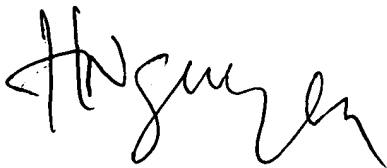
Kim (US Pat. 6,208,631 B1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Friday from 8:30 to 4:30PM. The examiner can also be reached on alternate

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild, can be reached on 571 272 2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hanh Nguyen

A handwritten signature in black ink, appearing to read 'Hanh Nguyen', with a stylized, cursive script.

**HANH NGUYEN
PRIMARY EXAMINER**